

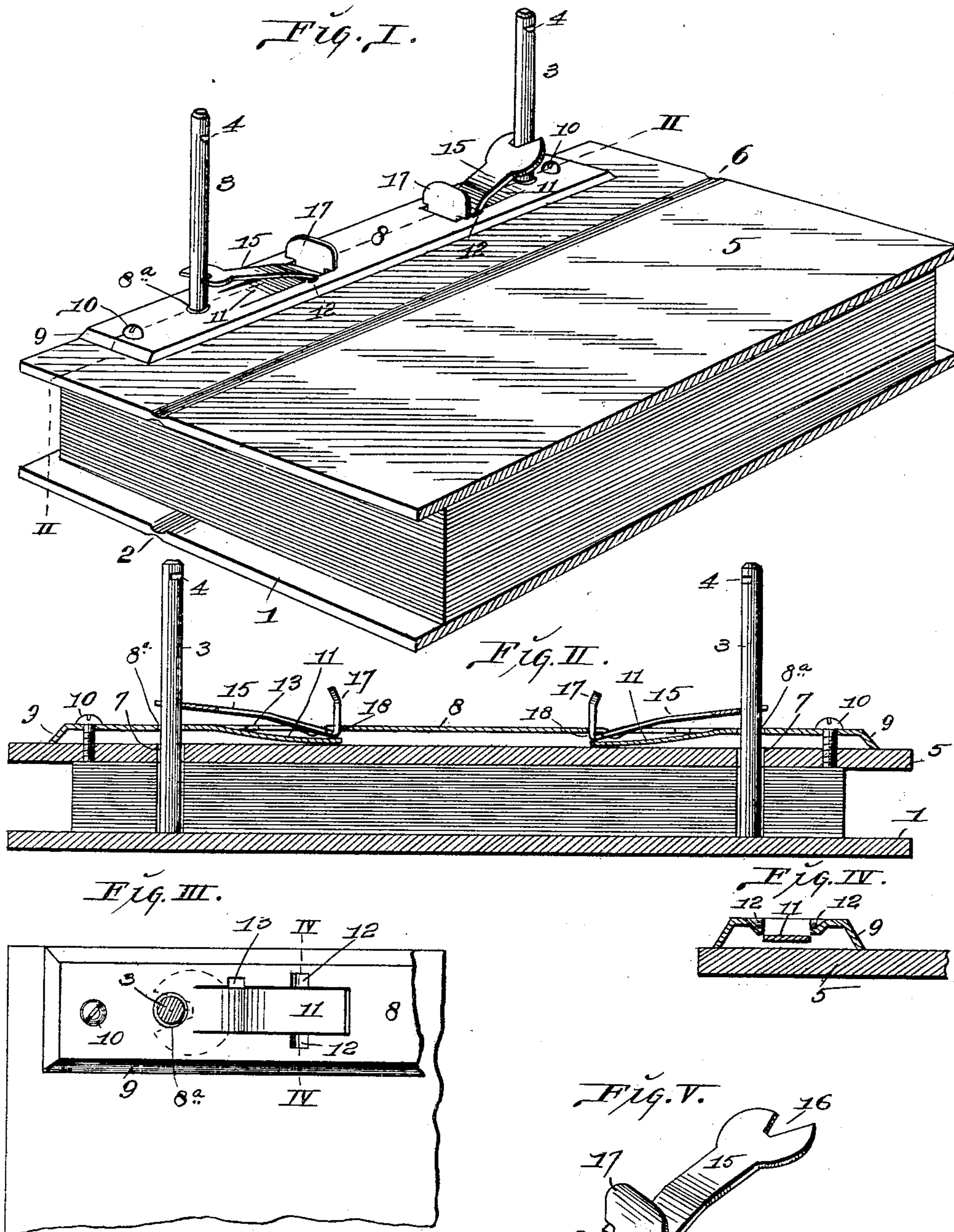
No. 664,825.

Patented Dec. 25, 1900.

E. A. TRUSSELL.
AUTOMATIC LOCK BINDER.

(Application filed Apr. 7, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

EMORY A. TRUSSELL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE SIEBER & TRUSSELL MANUFACTURING COMPANY, OF SAME PLACE.

AUTOMATIC LOCK-BINDER.

SPECIFICATION forming part of Letters Patent No. 664,825, dated December 25, 1900.

Application filed April 7, 1900. Serial No. 11,972. (No model.)

To all whom it may concern:

Be it known that I, EMORY A. TRUSSELL, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have
5 invented certain new and useful Improvements in Automatic Lock-Binders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.
10

My invention relates to a binding device for confining and holding a series of loose sheets of paper.

The invention consists in features of novelty hereinafter fully described, and pointed
15 out in the claim.

Figure I is a perspective view of my improved binder. Fig. II is a cross-sectional view taken on the line II II, Fig. I. Fig. III
20 is an enlarged detail view of a fragment of the top board of the binder with the clutch-lever removed. Fig. IV is a cross-sectional view taken on the line IV IV, Fig. III. Fig. V is an enlarged perspective view of one of
25 the clutch-levers.

The binder is constructed with the usual bottom board, provided with a flexible hinge 2, and two posts 3, having notches 4 at their
30 upper ends.

5 is the top board, having a flexible hinge 6 and provided with apertures 7, adapted to receive the posts 3 when the top and bottom boards are assembled.

8 designates a plate secured to the top board
35 and having a downturned edge 9 throughout its extent seated upon the top board 5, so that the body of the plate is elevated from the board, as seen in Figs. II and IV. The plate is secured to the board by any suitable
40 means, such as screws 10, and is provided with apertures 8^a, coinciding with the apertures 7.

11 designates springs that are struck from the plate 8, one end of each spring remaining
45 intact with the plate and the opposite end of each spring being free. The cutting out of the springs 11 provides openings for the plate that receive the heels of the post engaging clutch-levers 15, hereinafter referred to. In
50 the edges of the plate at the free ends of the springs 11 are depressions 12, and in one edge

of said plate beside each spring 11 are notches 13. (See Figs. II and III.) The clutch-levers 15 are formed with forks 16 at their outer ends adapted to engage the posts 3. Each
55 clutch-lever is provided with a handle 17, projecting at an angle to the clutching end of the lever from the heel 18. Projecting from the edges of the clutch-levers are spurs 19, located at the heels 18, said spurs being de-
60 signed to fit under the edges of the plate 8 above the springs 11 and confine the levers to said plate. The spurs 19 fit in the rear of the depressions 12, in which position they are held from escape by the depressed portion of
65 the plate.

In applying the clutch-levers the springs 11 are pressed downwardly and the levers are inserted into the openings formed by cutting
70 out the spring 11, one of the spurs 19 of each lever being passed under the edge of the plate opposite that containing the notch 13, with the heel 18 bearing against the spring. The other spur 18 is then passed through the
75 notch 13 and the lever is moved inwardly to carry the spurs past the depressions 12, where they are held from accidental escape. The heels 18 of the levers are thus moved to the
80 ends of the springs 11 and rest upon said springs. With the levers in such position the outer free ends are in position to engage
85 the posts 3 by reason of the forks 16 straddling said posts, and the cover-boards are therefore held firmly together, confining the papers between them.

When it is desired to remove the top board, the handles 17 of the two clutch-levers are grasped by the thumb and finger and moved toward each other, in which operation the
90 forked ends of the levers are removed from engagement with the posts 3, so that the top board may be lifted by the handles 17 and removed from the posts. In replacing the top
95 board it is only necessary to pass the posts through the apertures 7 and 8^a in the top board and plate 8, when a downward pressure upon the board will cause it to descend on the posts. The notches 4 in the upper ends
100 of the posts are intended, as is usual in this class of binder, to receive the engagement of the clutch-levers and hold them when the binder is filled to its capacity.

I claim as my invention—

In a binder, the combination of a bottom board, posts carried thereby, a top board, a plate carried by said top board having a raised
5 body, springs fixed to the body of said plate, clutch-levers arranged to bear upon said springs and having forked ends adapted to engage said posts, handles projecting upwardly from said levers, spurs projecting
10 from the edges of said levers adapted to en-

gage beneath the body of said plate, said plate being provided with depressed portions, said depressed portions of the plate being adapted to confine said spurs, substantially as described.

EMORY A. TRUSSELL.

In presence of--

CHAS. SIEBER,
CAMPBELL DAWSON.